

In the Claims

Claim 1 (Currently amended): A dried photosensitizer-carrier composition, comprising:

- (a) a mixture of at least one photosensitizer and at least one ~~block~~ triblock copolymer carrier agent; and
- (b) at least one solid support physically associated with said mixture; wherein said composition forms a complex selected from the group consisting of micelles, vesicles, emulsion, gel and matrix upon hydration with an aqueous medium.

Claim 2 (Original): The composition of claim 1 wherein said support is an endo-support, and said photosensitizer and carrier agent mixture is deposited on said endo-support.

Claim 3 (Previously presented): The composition of claim 1 wherein said composition forms, upon hydration with an aqueous based medium, a complex that is micellar.

Claim 4 (Currently amended): A method for formulating a dried mixture of photosensitizer and carrier agent, comprising the steps of:

- (a) mixing together at least one photosensitizer and at least one ~~block~~ triblock copolymer carrier agent in liquid form in contact with at least one solid support; and
- (b) physically associating the mixture of photosensitizer and carrier agent with said solid support upon drying said mixture; wherein said mixture forms a complex selected from the group consisting of micelles, vesicles, emulsion, gel and matrix upon hydration with an aqueous medium.

Claim 5 (Original): The method of claim 4 wherein said carrier agent in liquid form comprises the agent dissolved in an organic solvent.

Claim 6 (Original): The method of claim 5 wherein said solvent is volatile.

Claim 7 (Original): The method of claim 4 wherein said support is an endo-support, and said photosensitizer and carrier agent mixture is deposited on said endo-support upon solidification.

Claim 8 (Original): The composition of claim 1 wherein said solid support is soluble or hydratable in an aqueous based medium.

Claim 9 (Original): The composition of claim 8 wherein said solid support is selected from the group consisting of a monosaccharide, disaccharide, aminoglycoside, and derivatives thereof.

Claim 10 (Original): The composition of claim 9 wherein the disaccharide is selected from the group consisting of maltose, lactose, sucrose and trehalose.

Claim 11 (Original): The composition of claim 1 wherein said photosensitizer is selected from the group consisting of porphyrins, pyrroles, telrapyrollic compounds, expanded pyrrolic macrocycles and their derivatives.

Claim 12 (Previously presented): The composition of claim 11 wherein said porphyrin derivative is selected from the group consisting of green porphyrins, tetrahydrochlorins, chlorins bacteriochlorins, isobacteriochlorins, pyropheophorbides, purpurins, texaphyrins, phenothiaziniums, phthalocyanines, naphthalocyanines, porphycenes and pheophorbides.

Claim 13 (Original): The composition of claim 12 wherein said green porphyrin is selected from the group consisting of benzoporphyrin derivatives (BPD).

Claim 14 (Original): The composition of claim 13 wherein said BPD is selected from a group consisting of A ring, B ring, C ring, and D ring derivatives.

Claim 15 (Previously presented): The composition of claim 14 wherein said BPD ring derivative is selected from a group consisting of benzoporphyrin derivative monoacid ring A (BPD-MA), A-EA6 and A-B3.

Claim 16 (Original): The composition of claim 7 wherein said endo-support is non-hydratable in an aqueous based medium.

Claim 17 (Previously presented): The composition of claim 16 wherein said endo-support is a polymeric compound.

Claim 18 (Previously presented): The method of claim 16 wherein said endo-support is removed after hydration of the photosensitizer-carrier mixture.

Claim 19 (Original): The composition of claim 1 wherein said support is an exo-support, and said photosensitizer and said carrier are encapsulated by said exo-support.

Claim 20 (Previously presented): The composition of claim 1 wherein said carrier agent is a poloxamer.

Claim 21 (Currently amended): The composition of claim 20 wherein said ~~block~~ triblock copolymer carrier is selected from the group consisting of symmetric A-B-A and non-symmetric A-B-A' triblock copolymers.

Claim 22 (Previously presented): The composition of claim 21 wherein said triblock copolymer is polyoxyethylene polyoxypropylene block copolymer of the formula $\text{HO}(\text{C}_2\text{H}_4\text{O})_a(\text{C}_3\text{H}_6\text{O})_b(\text{C}_2\text{H}_4\text{O})_c\text{H}$, where a and c are independently 1-150 units and b = 10-200 units with the overall molecular weight ranging from 1,000 to 50,000 daltons.

Claim 23 (Previously presented): The composition of claim 22 wherein said triblock copolymer is selected from a group consisting of poloxamers wherein $a = c = 1$ to 150 units and $b = 10-200$ units

Claim 24 (Previously presented): The composition of claim 23 wherein said poloxamer is selected from a group consisting of poloxamer 403 (P123), poloxamer 407 (F127), poloxamer 402

(L122), poloxamer 181 (L61), poloxamer 401 (L121), poloxamer 185 (P65), poloxamer 188 (F68) and poloxamer 338 (F108).

Claim 25 (Previously presented): The composition of claim 24 wherein said poloxamer is selected from a group consisting of poloxamer 181 (L61), poloxamer 401 (L121), and poloxamer 402 (L122).

Claim 26 (Previously presented) A method of preparing a hydrated photosensitizer-carrier complex comprising preparing a dried mixture of photosensitizer and carrier agent by the method of claim 4 and hydrating said mixture of photosensitizer and carrier agent with an aqueous based medium to produce a hydrated photosensitizer-carrier complex.

Claim 27 (Previously presented) The method of claim 26 wherein said complex is micellar.

Claim 28 (Previously presented): The method of claim 26 wherein said hydrated mixture of photosensitizer, carrier agent, and solid support is further processed to a reduced size or further formulated.

Claim 29 (Cancelled).

Claim 30 (Original): A method for conducting photodynamic therapy comprising:
administering a photosensitizer and copolymer complex produced by hydration of the composition of claim 1 to a subject in need of photodynamic therapy; and irradiating said subject to activate said photosensitizer.